**Angle Relationships, Part 2** Name:

Rodriguez/Geometry

Time to investigate some special angle relationships!

**Part 1: Parallel and Perpendicular Lines**

**Parallel Lines**

SPECIAL NOTATION: If two lines are parallel, you’ll see this symbol: \_\_\_\_\_\_\_\_\_

In *pictures*, you’ll see this:

Remember: don’t always assume from diagrams! Lines may “look” parallel or perpendicular (and they probably are), but you need evidence in order to be sure!

Those “arrowheads” indicate

that the two lines are parallel to

each other.

If lines each have the same number of arrow markings, then they are parallel to each other.

If lines have different numbers of arrow markings, then they are not parallel to each other.

**Perpendicular Lines**

**Part 2: Angles Formed by Parallel Lines – Investigate**

Cool angles are made when you cut parallel lines!

Here, there are two parallel lines, c and d, cut by line f. Line f is called a **transversal**.

**Your job right now**: Figure out what’s special about the 8 angles that are formed by the transversal. Are they the same? Different? Are they supplementary, complementary, vertical? What’s happening?

Write down your observations in the box below.

(And don’t forget to talk to someone else about what you noticed…)

**Part 3: Angles Formed by Parallel Lines – Conclusions**

**Alternate Interior Corresponding**

**Alternate Exterior Linear Pair / Supplementary**